

January 5, 2004
Serial No. 10/619,793
Examiner: UNK
Art Unit 3752
Page 3

IN THE CLAIMS:

1. (Currently Amended) An apparatus for use in applying coating material to an object, said apparatus comprising a spray gun having a handle portion, an extension portion which is connected with said handle portion, a nozzle connected with said extension portion, and a membrane switch manually activated to initiate a control function on electrode disposed adjacent to said nozzle and away from which electrostatically charged coating material flows toward the object, a coating material flow control member connected with said handle portion and manually operable to an actuated condition to initiate a flow of coating material from a coating material passage in said extension portion through said nozzle toward the object, and a purge air flow control member connected with said handle portion and manually operable to initiate a flow of air from the coating material passage in said extension portion through said nozzle to remove coating material from said spray gun.

2-71. Canceled.

72. (New) The apparatus of claim 1 comprising at least one control member associated with the handle and manually operable to an actuated condition, said membrane switch being activated upon manual actuation of said control member.

73. (New) The apparatus of claim 1 wherein said membrane switch is operative to send signals for controlling a coating operation performed by the apparatus.

January 5, 2004
Serial No. 10/619,793
Examiner: UNK
Art Unit 3752
Page 4

74. (New) The apparatus of claim 1 wherein said membrane switch is formed as a unit installed with said handle portion.

75. (New) The apparatus of claim 1 wherein said membrane switch includes at least one switch element disposed between layers of electrically insulating material, said switch element being deflected during actuation of said membrane switch.

76. (New) The apparatus of claim 1 wherein said membrane switch includes a first layer of electrically insulating material, a second layer of electrically insulating material and at least one set of switch contacts disposed between the first and second layers of electrically insulating material and actuated by movement of an associated control member.

77. (New) The apparatus of claim 76 wherein each pair of switch contacts comprises a first switch element disposed between the first and second layers of electrically insulating material, a second switch element disposed between the first and second layers of electrically insulating material, the first switch element being resiliently deflectable relative to the second switch element from an unactuated condition in which the first switch element is spaced from the second switch element to an actuated condition in which at least a portion of the first switch element engages the second switch element, the first layer of electrically insulating material being deflectable under the influence of force transmitted from the associated control member upon manual movement of the flow control member, the first switch element being resiliently deflected from the unactuated condition to the actuated condition under the influence of force

January 5, 2004
Serial No. 10/619,793
Examiner: UNK
Art Unit 3752
Page 5

transmitted from the first layer of electrically insulating material to the first switch element upon deflection of the first layer of electrically insulating material.

78. (New) The apparatus of claim 76 wherein the first layer of electrically insulating material and the second layer of electrically insulating material are sealingly interconnected to block contaminants from entering between the first and second layers of electrically insulating material.

79. (New) The apparatus of claim 78 wherein the first switch element is movable, under the influence of its own resilience, relative to the second switch element from the actuated condition in which at least a portion of the first switch element engages the second switch element to the unactuated condition in which the first switch element is spaced from the second switch element.

80. (New) The apparatus of claim 1 wherein said handle portion includes an outer side surface which faces toward the nozzle, said membrane switch comprising an electrically insulating material having a first major side surface which is disposed in engagement with the outer side surface of the handle portion of the spray gun, and a control member movable relative to the handle portion to effect the application of force against a second major side surface on the first layer of electrically insulating material.

JAN. 5. 2004 12:11PM

CALFEE HALTER & GRISWOLD LLP

NO. 3039 P. 7

January 5, 2004
Serial No. 10/619,793
Examiner: UNK
Art Unit 3752
Page 6

81. (New) The apparatus of claim 1 comprising two membrane switches associated with said handle portion of said spray gun.